

## bit

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **44**
- SRM **10.2**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **8.5 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **19 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **68.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **1.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1 kg (40%)	79 %	6
Grain	Strzegom Wiedeński	0.5 kg (20%)	79 %	10
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (20%)	79 %	130
Adjunct	kukurydza	0.5 kg (20%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	25 g	60 min	8 %
Aroma (end of boil)	Northern Brewer	25 g	5 min	8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Culture	80 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Finning	mech irlandzki	3 g	Boil	55 min